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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,946	03/05/2002	Hideyuki Motoyama	FUJI 19.494	6413

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EXAMINER

TAYLOR, BARRY W

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/090,946

Applicant(s)

MOTOYAMA ET AL.

Examiner

Barry W Taylor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suonsivu et al (6,542,581 hereinafter Suonsivu) in view of Kao et al (6,292,515 hereinafter Kao).

Regarding claims 1 and 9. Suonsivu teaches a DSL communication method for interconnecting a user and a center (see figure 2) comprising:

monitoring a signal-to-noise ratio of an accepted DSL (see figure 3 wherein step 3 "get S/N" reads on monitoring signal-to-noise);

judging whether or not the S/N ratio is within a predetermined range. See figure 3 wherein system reference values are first established (i.e. step 1 establishes S/N reference value that the measured S/N value measured in step 3 is not allowed to fall below), next figure 3 shows judging (i.e. step 4) wherein "get S/N" obtained from step 3 is compared to system reference value S/N ref.

Suonsivu does not explicitly show interrupting the intercommunication once the and thereafter reconnecting the user and center, when the S/N is judged not to be within the predetermined range for a duration longer than a reference time. However, Suonsivu discloses adjusting power level to achieve desired transmission quality for predetermined time (see "Wait" period step 8 figure 3).

Kao also teaches a DSL communication system and method wherein the system can select a first or second adaptation routine to handle changes in bit and gain loadings of DSL protocol (abstract). Kao discloses using a fine tune process that is adaptable and flexible enough to be used in conjunction with standard modem initialization (col. 6 lines 54-58). In other words, Kao provides for real time, adaptive, high-speed communications system which, even after initialization, continues to dynamically alter transmission parameters (col. 5 lines 24-34, col. 6 lines 26-31, col. 15 line 45 – co. 16 line 67). Kao discloses an iteration criteria parameter can be implemented so that the number of iterations or total timeout period can be controlled (col. 7 lines 43-67). Kao further discloses bit and gain routine allows for fine-tuning the system best suited for particular needs (col. 8 lines 9-20). Kao discloses using an

adaptive compensation allowing for adjustments after modem initialization (col. 15 line 45 – col. 16 line 67). Kao invention allows for faster setup and adjustment times (columns 19-20).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the invention as taught by Suonsivu to use adaptation routine as taught by Kao for the benefit of quickly achieving data transfer mode.

Regarding claims 2 and 10. Claims 2 and 10 do not contain any additional features, which, in combination with the features of claims 1 and 9 would lead to a novel subject matter. The Examiner notes that setting upper and lower limit for a predetermined or target operating range, as defined in claims 2 and 10, would be an obvious measure to a person with ordinary skill in the art. Furthermore, Suonsivu sets an operating range for S/N (see figure 3 and col. 5 lines 31-37).

Regarding claims 3-4 and 11-12. Suonsivu shows arbitrarily setting delay time (see delay time step 8 figure 3).

Regarding claims 5-6 and 13-14. Suonsivu does not show first time for S/N above reference value and second time used for S/N below reference value wherein first and second times are same.

Kao also teaches a DSL communication system and method wherein the system can select a first or second adaptation routine to handle changes in bit and gain loadings of DSL protocol (abstract). Kao discloses using a fine tune process that is

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adaptable and flexible enough to be used in conjunction with standard modem initialization (col. 6 lines 54-58). In other words, Kao provides for real time, adaptive, high-speed communications system which, even after initialization, continues to dynamically alter transmission parameters (col. 5 lines 24-34, col. 6 lines 26-31, col. 15 line 45 – col. 16 line 67). Kao discloses an iteration criteria parameter can be implemented so that the number of iterations or total timeout period can be controlled (col. 7 lines 43-67). Kao further discloses bit and gain routine allows for fine-tuning the system best suited for particular needs (col. 8 lines 9-20). Kao discloses using an adaptive compensation allowing for adjustments after modem initialization (col. 15 line 45 – col. 16 line 67). Kao invention allows for faster setup and adjustment times (columns 19-20).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the invention as taught by Suonsivu to use adaptation routine as taught by Kao for the benefit of quickly achieving data transfer mode.

Regarding claims 7-8 and 15-16. Suonsivu does not show first time for S/N above reference value and second time used for S/N below reference value wherein first and second times are different.

Kao also teaches a DSL communication system and method wherein the system can select a first or second adaptation routine to handle changes in bit and gain loadings of DSL protocol (abstract). Kao discloses using a fine tune process that is adaptable and flexible enough to be used in conjunction with standard modem initialization (col. 6 lines 54-58). In other words, Kao provides for real time, adaptive,

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high-speed communications system which, even after initialization, continues to dynamically alter transmission parameters (col. 5 lines 24-34, col. 6 lines 26-31, col. 15 line 45 – col. 16 line 67). Kao discloses an iteration criteria parameter can be implemented so that the number of iterations or total timeout period can be controlled (col. 7 lines 43-67). Kao further discloses bit and gain routine allows for fine-tuning the system best suited for particular needs (col. 8 lines 9-20). Kao discloses using an adaptive compensation allowing for adjustments after modem initialization (col. 15 line 45 – col. 16 line 67). Kao invention allows for faster setup and adjustment times (columns 19-20).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the invention as taught by Suonsivu to use adaptation routine as taught by Kao for the benefit of quickly achieving data transfer mode.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor whose telephone number is (703) 305-4811. The examiner can normally be reached on Monday-Friday from 6:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703) 305-4708. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 customer service Office whose telephone number is (703) 306-0377.


CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600